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De Haas-van Alphen Effect in UIr

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We have succeeded in growing a high-quality single crystal of UIr with the monoclinic structure by the Czochralski pulling method in a tetra-arc furnace. UIr is a ferromagnetic compound. Its Curie temperature T_C is 46 K and the magnetic moment is found to be oriented along the $[10\bar{1}]$ direction by the magnetization measurement. The magnetic moment is $0.5 \mu_B/\text{U}$. We observed the de Haas-van Alphen (dHvA) oscillation. All the detected branches have moderately heavy cyclotron effective masses ranging from 9.6 to $32 m_0$. They are consistent with the electronic specific heat coefficient $\gamma=48.5 \text{ mJ/K}^2\cdot\text{mol}$.